RD VENTILATION SYSTEMS LTD

Pressure Stabilisers

Designed to provide a reliable solution to the implementation of regulated differential air pressure between two rooms.

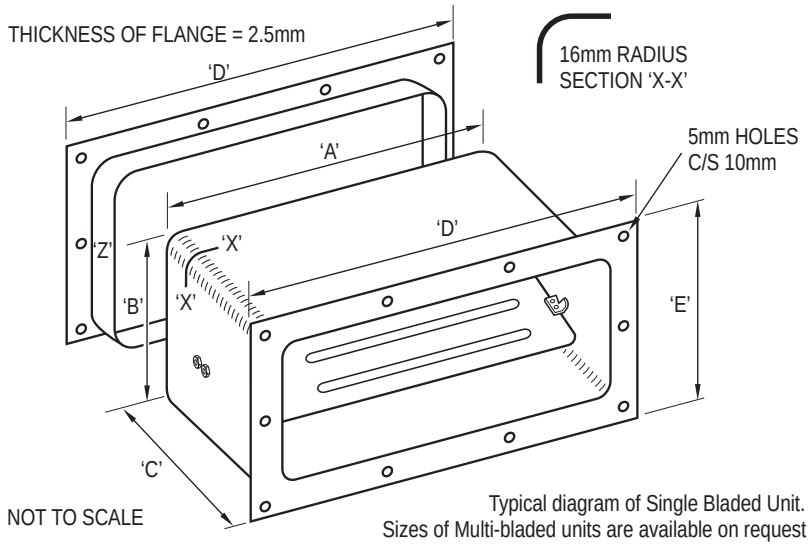
AIRMASTER

Pressure Stabilisers

R&D VENTILATION SYSTEMS LTD

Introduction

The guarantee of clean, filtered air is essential in many hospital and industrial environments.
A standard technique is to supply treated air into the 'clean' zone and maintain a positive differential air pressure between this zone and adjacent rooms or corridors.
The R & D Pressure Stabiliser provides a simple and reliable solution to the implementation of regulated differential air pressure between two rooms.



Typical diagram of Single Bladed Unit.
Sizes of Multi-bladed units are available on request

Operation

The stabiliser regulates the zone air pressure by utilising a finely balanced blade mounted in an aperture. When the differential pressure between the two zones reaches a given value the blade opens. This allows air to flow through the stabiliser and reduces the 'clean' zone pressure. When the zone pressure falls below the given value the blade immediately closes. The blade will also close if back pressure is encountered thus preventing 'dirty' air entering the 'clean' zone.
The R&D Pressure Stabiliser is designed to operate over a differential total pressure range of between 8 and 35 Pascals, with a maximum hysteresis of 1.25 Pascals.
Typical applications are in operating theatres, laboratories, clean rooms, computer rooms and microelectronics fabrication and assembly suites.

Construction

Stabilisers are manufactured from aluminium and have a white, polyester, powder coated finish which provides a clinical and resilient surface. Stabilisers can also be manufactured in stainless steel. Each blade is supported by stainless steel knife-edge bearings. These allow for easy removal and replacement without tools, by non-specialist staff, for the purposes of cleaning and sterilisation.
Stabilisers can be supplied as one, two, three or four blade units of various heights, widths and depths to suit air volume and building construction requirements. All stabilisers are available with backflanges for partition wall installation and can also be fitted to fire dampers.

Calibration

R&D Pressure Stabilisers are individually, factory calibrated to the customer's pressure settings, the value of which is engraved on the end caps of the blade balancing tubes. Each Stabiliser is given a unique serial number and is provided with a calibration certificate.

Typical Single Blade Stabiliser Sizes
Dimensions in mm.

Nominal Size	Stabiliser Casing A	B	C	D	E	Z
230 x 110	235	118	105	286	168	Determined by the thickness of wall, partition, etc.
310 x 150	311	159	130	361	209	
400 x 150	412	159	130	464	209	
508 x 150	514	159	130	565	209	
600 x 150	617	159	130	667	209	

A full range of sizes is available on request

R&D Ventilation Systems Ltd

Industrial Estate,
Neath Abbey, Neath,
West Glamorgan SA10 7DR
Tel: +44 (0) 1792 813231
Fax: +44 (0) 1792 321816